SECTION V - CONSEVATION EFFECTS

INTRODUCTION

Section V of the Field Office Technical Guide, "Conservation Effects", reflects a strong focus on the people making conservation decisions - our clients. The section provides a place to record what NRCS planners know or discover about the effects of using conservation systems. Do gypsum blocks really improve water use? If so, at what cost? As answers to these types of questions become known, they are recorded in Section V.

This section also provides a sound and consistent framework for communicating information about the effects of conservation to decision-makers. These effects are considered from an ecosystem based perspective. They include changes to soil, water, air plant and animal resources (e.g. A Resource Management System reduces erosion by 5 tons per acre). They also consider economic, soil or cultural resource changes (e.g. Conservation tillage saves $25 per acre in tillage costs but adds $10 per acre in pesticide expenses).

Section V is tightly woven into the conservation planning processes. The Conservation Practice Physical Effects (CPPE) part of this section can help planners select conservation practices for building Resource Management Systems (RMS). The CPPE are matrices showing how each NRCS conservation practice affects a conservation problem or concern (e.g. Conservation tillage significantly decreases sheet and rill erosion on cropland).

The guide sheets used in this section, call Conservation Effects Worksheets or Conservation Treatment Information forms, describe the effects of adopting an RMS. These effects are ecosystem based, impacting soil, water, air, plants and animal resources. The effects also may involve economic, social or cultural resource changes (e.g. Conservation tillage saves $10 per acre; or, farmers adopted conservation after a farmer-led coordination group was formed). Farm case studies and other methods used to record and communicate conservation effects are also stored in this section.

The nine steps of conservation planning emphasize that NRCS planners should respond to the needs of clients. Often this need is for more and better information about what happens when conservation systems are adopted. Section V provides the repository to collect and store this type of information. Keep in mind that the tools needed to measure and analyze conservation effects are contained in training materials and reference texts kept outside the FOTG.

Section V contains the following parts:

V-A. Effects for RMS formulation. Documents conservation effects information for use in building RMS guidance documents (Section III). Stores supporting guidance documents.

> **V-A-1. General Effects Data: soil, water, air, plants, and animals**. This section stores the Conservation Practices Physical Effects (CPPE) matrices. These matrices consist of resource problems or concerns, conservation practices and a description of how the practice affects the problem in the matrix.
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> **V-A-2. Effects for Guidance Documents**. This section stores the supporting documents used with the RMS guidance documents found in Section III (Checklist of Resource Problems or Conditions, Site Specific Practice Effects Worksheet (SSPEW), Conservation Management Systems Options Worksheet, Resource Management Systems Guidesheet). Can also reference where these documents or any possible scratch calculations can be located in the field office. Also stores Section V guidance documents (Conservation Treatment Information forms and Conservation Effects Worksheets) and any scratch or calculation sheets used.

V-B. Effects for Decision-makers. This section stores information about conservation effects gathered from on-farm studies or from other sources (e.g. conservation field trials, case studies, university research. Etc.).

> **V-B-1. Producer Experiences**. This section documents on-farm changes caused by the adoption of conservation systems, shows "before and after" results and allows potential clients to see real world examples of what happens when they adopt conservation. Benchmark farm conditions (before conservation adoption) are compared to Improved Farm Conditions (after conservation adoption). This information is packaged in a case study that can be used to assist conservation efforts.
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> **V-B-2. Other Effects Information**. This section stores information about "before and after" conservation adoption effects that have been developed by non-NRCS sources, such as university research, computer simulations, or journal articles.

V-C. Procedural Reference. Documents NRCS reference material.